

	Type	L #	Hits	Search Text	DBs	Time Stamp
1	IS&R	L1	10	((("6174822") or ("6292352") or ("5218512") or ("5397446") or ("5546342") or ("5820946") or ("5858851") or ("6046926") or ("6066540") or ("6091099")).PN.	USPAT; US-PGPUB	2002/12/06 14:55
2	IS&R	L2	39	((("6204070") or ("6225656") or ("6225656") or ("6232131") or ("6313539") or ("6342425") or ("6404003") or ("6455882") or ("6140672") or ("5877977") or ("5731608") or ("5932904") or ("5942776") or ("5962884") or ("6011285") or ("6018171") or ("6048738") or ("6117691") or ("6146904") or ("6242771") or ("5524092") or ("5780886") or ("5989927") or ("6013950") or ("5436490") or ("5621681") or ("5640345") or ("5744374") or ("6188600") or ("6194752") or ("6245451") or ("5248564") or ("5517445") or ("5572052") or ("5623439") or ("5625587") or ("5645976") or ("5654567") or ("5686745") or ("6107656")).PN.	USPAT; US-PGPUB	2002/12/06 14:55
3	IS&R	L3	4	((("5960252") or ("5624864") or ("5374578") or ("5218512")).PN.	USPAT; US-PGPUB	2002/12/06 15:00
4	BRS	L4	6	(1 or 2 or 3) and tensile	USPAT; US-PGPUB	2002/12/06 15:04
5	IS&R	L5	1205	(438/3,240).CCLS.	USPAT; US-PGPUB	2002/12/06 15:04
6	BRS	L6	28	5 and tensile	USPAT; US-PGPUB	2002/12/06 15:04

Most Frequently Occurring Classifications of Patents Returned  
From A Search of 09/990,424 on December 05, 2002

Combined Classifications

26 257/295  
20 257/E29.272  
18 257/E27.104  
18 438/3  
17 365/145  
10 438/240  
8 257/310  
6 257/306  
4 365/149  
4 438/396  
3 257/300  
3 257/316  
3 257/410  
3 257/532  
3 257/E29.164  
3 257/E29.343  
3 438/253  
2 204/192.18  
2 204/192.2  
2 204/192.26  
2 257/256  
2 257/296  
2 257/315  
2 257/411  
2 257/632  
2 257/761  
2 257/769  
2 361/313  
2 361/321.1  
2 365/177  
2 365/185.01  
2 427/255.32  
2 427/596  
2 438/250  
2 438/287  
2 438/758  
2 438/783  
2 438/957

- gate transistor combined with capacitor (e.g., dynamic memory cell)
- 257/310 ...With high dielectric constant insulator (e.g., Ta2Os)
- 6 257/306 (2 OR, 4 XR)
  - Class 257 : ACTIVE SOLID-STATE DEVICES
  - 257/213 (E) FIELD EFFECT Device
  - 257/288 ..(E) Having insulated electrode (e.g., MOSFET, MOS diode)
  - 257/296 ..(E) Insulated gate capacitor or insulated gate transistor combined with capacitor (e.g., dynamic memory cell)
  - 257/306 ...Stacked capacitor
- 4 365/149 (0 OR, 4 XR)
  - Class 365 : STATIC INFORMATION STORAGE AND RETRIEVAL
  - 365/129 SYSTEMS USING PARTICULAR ELEMENT
  - 365/149 .Capacitors
- 4 438/396 (3 OR, 1 XR)
  - Class 438 : SEMICONDUCTOR DEVICE MANUFACTURING: PROCESS
  - 438/381 MAKING PASSIVE DEVICE (E.G., RESISTOR, CAPACITOR, ETC.)
  - 438/396 .Stacked capacitor
- 3 257/300 (0 OR, 3 XR)
  - Class 257 : ACTIVE SOLID-STATE DEVICES
  - 257/213 (E) FIELD EFFECT Device
  - 257/288 ..(E) Having insulated electrode (e.g., MOSFET, MOS diode)
  - 257/296 ..(E) Insulated gate capacitor or insulated gate transistor combined with capacitor (e.g., dynamic memory cell)
  - 257/300 ...Capacitor coupled to, or forms gate of, insulated gate field effect transistor (e.g., nondestructive readout dynamic memory cell structure)
- 3 257/316 (0 OR, 3 XR)
  - Class 257 : ACTIVE SOLID-STATE DEVICES
  - 257/213 (E) FIELD EFFECT Device
  - 257/288 ..(E) Having insulated electrode (e.g., MOSFET, MOS diode)
  - 257/314 ..Variable threshold (e.g., floating gate memory device)
  - 257/315 ... (E) With floating gate electrode
  - 257/316 ....With additional contacted control electrode
- 3 257/410 (1 OR, 2 XR)
  - Class 257 : ACTIVE SOLID-STATE DEVICES
  - 257/213 (E) FIELD EFFECT Device
  - 257/288 ..(E) Having insulated electrode (e.g., MOSFET, MOS diode)
  - 257/410 ..Gate insulator includes material (including air or vacuum) other than SiO2

PLUS Search Results for S/N 09/990,424, Searched December 05, 2002 (Top 50)

6174822	6204070	5731608	5524092	6245451
6292352	6225656	5932904	5780886	5248564
5218512	6225656	5942776	5989927	5517445
5397446	6232131	5962884	6013950	5572052
5546342	6313539	6011285	5436490	5623439
5820946	6342425	6018171	5621681	5625587
5858851	6404003	6048738	5640345	5645976
6046926	6455882	6117691	5744374	5654567
6066540	6140672	6146904	6188600	5686745
6091099	5877977	6242771	6194752	6107656

- 26 257/295 (16 OR, 10 XR)  
Class 257 : ACTIVE SOLID-STATE DEVICES  
257/213 (E) FIELD EFFECT Device  
257/288 (E) Having insulated electrode (e.g., MOSFET,  
MOS diode)  
257/295 ..(E) With ferroelectric material layer
- 20 257/E29.272 (0 OR, 20 XR)  
Class 257 : ACTIVE SOLID-STATE DEVICES  
257/E29.162 ....Insulating materials for IGFET (EPO)  
257/E29.166 .Types of semiconductor semiconductor device  
(EPO)  
257/E29.169 ..Controllable by only signal applied to  
control electrode (e.g., base of bipolar transistor, gate  
of field effect transistor) (EPO)  
257/E29.226 ...Unipolar device (EPO)  
257/E29.242 ....Field effect transistor (EPO)  
257/E29.255 .....With field effect produced by insulated  
gate (EPO)  
257/E29.272 .....Gate comprising ferroelectric layer  
(EPO)
- 18 257/E27.104 (0 OR, 18 XR)  
Class 257 : ACTIVE SOLID-STATE DEVICES  
Could not find subclass title.
- 18 438/3 (7 OR, 11 XR)  
Class 438 : SEMICONDUCTOR DEVICE MANUFACTURING: PROCESS  
  
438/3 HAVING MAGNETIC OR FERROELECTRIC COMPONENT
- 17 365/145 (8 OR, 9 XR)  
Class 365 : STATIC INFORMATION STORAGE AND RETRIEVAL  
365/129 SYSTEMS USING PARTICULAR ELEMENT  
365/145 .Ferroelectric
- 10 438/240 (0 OR, 10 XR)  
Class 438 : SEMICONDUCTOR DEVICE MANUFACTURING: PROCESS  
  
438/142 MAKING FIELD EFFECT DEVICE HAVING PAIR OF  
ACTIVE REGIONS SEPARATED BY GATE STRUCTURE BY FORMATION OR  
ALTERATION OF SEMICONDUCTIVE ACTIVE REGIONS  
438/197 .Having insulated gate (e.g., IGFET, MISFET,  
MOSFET, etc.)  
438/238 ..Including passive device (e.g., resistor,  
capacitor, etc.)  
438/239 ...Capacitor  
438/240 ....Having high dielectric constant insulator  
(e.g., Ta2O5, etc.)
- 8 257/310 (1 OR, 7 XR)  
Class 257 : ACTIVE SOLID-STATE DEVICES  
257/213 (E) FIELD EFFECT Device  
257/288 (E) Having insulated electrode (e.g., MOSFET,  
MOS diode)  
257/296 ..(E) Insulated gate capacitor or insulated

	Document ID	Pages	Title	Current OR	Current XRef	Inventor
1	US 6174822 B1	20	Semiconductor device and method for fabricating the same	438/763	438/240; 438/250; 438/3; 438/393	Nagano, Yoshihisa et al.
2	US 5858851 A	11	Manufacturing method of electrode	438/396	438/240; 438/253; 438/3; 438/653	Yamagata, Satoru et al.
3	US 6232131 B1	8	Method for manufacturing semiconductor device with ferroelectric capacitors including multiple annealing steps	438/3	438/240; 438/656	Nagano, Yoshihisa et al.
4	US 6225656 B1	14	Ferroelectric integrated circuit with protective layer incorporating oxygen and method for fabricating same	257/295	257/632; 257/E27.104; 438/3; 438/758; 438/783	Cuchiaro, Joseph D. et al.
5	US 6140672 A	21	Ferroelectric field effect transistor having a gate electrode being electrically connected to the bottom electrode of a ferroelectric capacitor	257/295	257/296; 257/300; 257/E27.103; 257/E29.343; 438/3	Arita, Koji et al.
6	US 5960252 A	14	Method for manufacturing a semiconductor memory device having a ferroelectric capacitor	438/3	257/E27.104; 438/240	Matsuki, Takeo et al.
7	US 5624864 A	25	Semiconductor device having capacitor and manufacturing method thereof	438/3	257/E27.104; 257/E29.343; 438/393; 438/396; 438/763; 438/958	Arita, Koji et al.
8	US 5374578 A	10	Ozone gas processing for ferroelectric memory circuits	438/3	148/DIG.3; 257/E27.104; 438/396	Patel, Divyesh N. et al.

PLUS + FPS

	Document ID	Pages	Title	Current OR	Current XRef	Inventor
1	US 6326316 B1	10	Method of manufacturing semiconductor devices	438/763	257/E29.343; 438/104; 438/240; 438/396; 438/656; 438/785	Kiyotoshi, Masahiro et al.
2	US 5923970 A	12	Method of fabricating a ferroelectric capacitor with a graded barrier layer structure	438/240	257/310; 438/396	Kirlin, Peter S.
3	US 5750419 A	9	Process for forming a semiconductor device having a ferroelectric capacitor	438/3	257/E27.104; 438/240; 438/250; 438/253	Zafar, Sufi

438/3, 240 & 253, 12